MC 87-I-24B(P)

PRELIMINARY REPORT
INDUSTRY SERIES

1987
Census of Manufactures

MC87-I-24B(P)
Issued July 1989

MILLWORK, PLYWOOD, AND STRUCTURAL WOOD MEMBERS, NOT ELSEWHERE CLASSIFIED

Industries 2431, 2434, 2435, 2436, and 2439

INTRODUCTION

This report presents preliminary statistics from the 1987 Census of Manufactures for those establishments classified in the industries listed above. These data will be superseded by a more comprehensive final paperbound report. The method of data collection and use of administrative data are discussed in detail in the appendix.

All dollar figures included in this report are at prices current for the year specified and, therefore, unadjusted for changes in price levels. Consequently, when making comparisons to prior years, users should take into consideration the inflation that has occurred.

The definitions of these industries are the same as those used in the 1987 Standard Industrial Classification (SIC) Manual.[1]

INDUSTRY 2431, MILLWORK

In the 1987 Census of Manufactures, Industry 2431, Millwork, had employment of 88.5 thousand. The employment figure was 56 percent above the 56.8 thousand reported in 1982.

The total value of shipments for establishments classified in this industry was $9.2 billion.

In 1987, establishments in this industry accounted for 96 percent of products considered primary to the industry regardless of the industry in which they were produced (coverage ratio). In 1982, the coverage ratio was 94. The products primary to this industry appear in table 2 and aggregated to $8.7 billion in 1987.

The cost of materials and services used by establishments in this industry amounted to $5.4 billion in 1987. Data on specific materials consumed appear in table 3.

INDUSTRY 2434, WOOD KITCHEN CABINETS

In the 1987 Census of Manufactures, Industry 2434, Wood Kitchen Cabinets, had employment of 67.3 thousand. The employment figure was 54 percent above the 43.6 thousand reported in 1982.

The total value of shipments for establishments classified in this industry was $4.4 billion.

In 1987, establishments in this industry accounted for 98 percent of products considered primary to the industry regardless of the industry in which they were produced (coverage ratio). In 1982, the coverage ratio was 97. The products primary to this industry appear in table 2 and aggregated to $4.2 billion in 1987.

The cost of materials and services used by establishments in this industry amounted to $1.9 billion in 1987. Data on specific materials consumed appear in table 3.

INDUSTRY 2435, HARDWOOD VENEER AND PLYWOOD

In the 1987 Census of Manufactures, Industry 2435, Hardwood Veneer and Plywood, had employment of 20.6 thousand. The employment figure was 16 percent above the 17.8 thousand reported in 1982.

The total value of shipments for establishments classified in this industry was $2.0 billion.

[1] **Standard Industrial Classification Manual: 1987.** For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Address inquiries to Bureau of the Census, Industry Division, Washington, DC 20233, or call **Bernice W. Patterson** (301) 763-2510.

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In 1987, establishments in this industry accounted for 96 percent of products considered primary to the industry regardless of the industry in which they were produced (coverage ratio). In 1982, the coverage ratio was 94. The products primary to this industry appear in table 2 and aggregated to $1.8 billion in 1987.

The cost of materials and services used by establishments in this industry amounted to $1.3 billion in 1987. Data on specific materials consumed appear in table 3.

INDUSTRY 2436, SOFTWOOD VENEER AND PLYWOOD

In the 1987 Census of Manufactures, Industry 2436, Softwood Veneer and Plywood, had employment of 38.2 thousand. The employment figure was 9 percent above the 34.9 thousand reported in 1982.

The total value of shipments for establishments classified in this industry was $4.9 billion.

In 1987, establishments in this industry accounted for 95 percent of products considered primary to the industry regardless of the industry in which they were produced (coverage ratio). In 1982, the coverage ratio was 94. The products primary to this industry appear in table 2 and aggregated to $4.4 billion in 1987.

The cost of materials and services used by establishments in this industry amounted to $2.9 billion in 1987. Data on specific materials consumed appear in table 3.

INDUSTRY 2439, STRUCTURAL WOOD MEMBERS, N.E.C.

In the 1987 Census of Manufactures, Industry 2439, Structural Wood Members, N.E.C., had employment of 24.5 thousand. The employment figure was 100 percent above the 12.2 thousand reported in 1982.

The total value of shipments for establishments classified in this industry was $1.9 billion.

In 1987, establishments in this industry accounted for 95 percent of products considered primary to the industry regardless of the industry in which they were produced (coverage ratio). In 1982, the coverage ratio was also 95. The products primary to this industry appear in table 2 and aggregated to $1.9 billion in 1987.

The cost of materials and services used by establishments in this industry amounted to $1.2 billion in 1987. Data on specific materials consumed appear in table 3.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in the tables in this publication:

-	Represents zero.
(D)	Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
(NA)	Not available.
(NC)	Not comparable.
(S)	Withheld because estimate did not meet publication standards on the basis of either the response rate or a consistency review.
(X)	Not applicable.
(Z)	Less than half the unit shown.
do	Ditto.
n.e.c.	Not elsewhere classified.
n.s.k.	Not specified by kind.
pt.	Part.
r	Revised.
SIC	Standard Industrial Classification.

Other abbreviations, such as lb, gal, yd, doz, bbl, and s tons, are used in the customary sense.

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Census/ASM		
Durables	Kenneth Hansen	(301) 763-7304
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Import/Export Publications	Foreign Trade Division	(301) 763-5140
Industry Analysis and Forecasts	International Trade Administration	(202) 377-4356

Table 1. Historical Statistics for the Industry: 1987 and Earlier Years

[Excludes data for auxiliaries. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix]

Year[1]	Companies[2] (no.)	All establishments[3] Total (no.)	All establishments[3] With 20 employees or more (no.)	All employees Number (1,000)	All employees Payroll (million dollars)	Production workers Number (1,000)	Production workers Hours (millions)	Production workers Wages (million dollars)	Value added by manufacture[4] (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures (million dollars)	End-of-year inventories[4] (million dollars)	Ratios Specialization (per cent)	Ratios Coverage (per cent)
INDUSTRY 2431, MILLWORK															
1987 Census	(NA)	2 710	848	88.5	1 800.4	71.2	139.8	1 206.1	3 781.9	5 429.4	9 152.7	171.1	1 155.7	95	96
1986 ASM	(NA)	(NA)	(NA)	77.2	1 493.4	61.1	119.8	1 054.9	3 091.0	4 692.9	7 748.9	164.9	1 052.5	(NA)	(NA)
1985 ASM	(NA)	(NA)	(NA)	73.1	1 359.5	59.2	115.5	961.2	2 637.6	4 186.7	6 812.8	137.4	953.2	(NA)	(NA)
1984 ASM	(NA)	(NA)	(NA)	74.1	1 277.0	60.3	115.4	905.8	2 641.5	3 860.8	6 489.3	139.1	938.3	(NA)	(NA)
1983 ASM	(NA)	(NA)	(NA)	67.9	1 125.6	54.7	106.5	819.4	2 268.7	3 437.6	5 627.3	103.1	930.6	(NA)	(NA)
1982 Census	2 192	2 321	642	56.8	895.4	44.7	83.5	645.6	1 712.6	2 502.0	4 248.3	79.9	791.2	93	94
1981 ASM	(NA)	(NA)	(NA)	65.2	944.8	52.2	99.5	672.1	1 924.5	2 951.0	4 859.7	105.0	775.1	(NA)	(NA)
1980 ASM	(NA)	(NA)	(NA)	65.5	876.7	51.9	98.8	620.4	1 770.6	2 787.6	4 569.0	99.0	777.5	(NA)	(NA)
1979 ASM	(NA)	(NA)	(NA)	73.0	893.1	59.4	113.5	650.2	1 960.2	2 971.6	4 898.0	103.5	758.6	(NA)	(NA)
1978 ASM	(NA)	(NA)	(NA)	72.0	835.7	59.5	114.4	608.9	1 797.8	2 872.2	4 617.1	82.5	726.1	(NA)	(NA)
1977 Census	2 209	2 333	692	68.6	742.2	56.6	108.4	542.0	1 497.9	2 460.4	3 928.1	81.0	605.0	94	94
1976 ASM	(NA)	(NA)	(NA)	60.5	633.0	49.8	97.7	459.2	1 276.0	1 946.0	3 185.7	66.0	490.5	(NA)	(NA)
1975 ASM	(NA)	(NA)	(NA)	54.8	538.1	44.3	85.7	375.2	1 028.6	1 486.7	2 499.5	45.0	419.3	(NA)	(NA)
1974 ASM	(NA)	(NA)	(NA)	59.1	517.3	48.1	93.9	367.9	923.1	1 544.1	2 471.3	61.7	397.1	(NA)	(NA)
1973 ASM	(NA)	(NA)	(NA)	72.0	567.6	51.5	111.3	418.0	1 067.9	1 715.6	2 756.6	51.5	443.2	(NA)	(NA)
1972 Census	2 340	2 434	720	70.5	524.5	58.4	110.8	383.6	962.7	1 485.4	2 426.8	57.2	365.2	94	94
INDUSTRY 2434, WOOD KITCHEN CABINETS															
1987 Census	(NA)	3 672	663	67.3	1 191.8	54.0	108.6	837.8	2 518.3	1 920.9	4 405.3	101.7	454.5	96	98
1986 ASM	(NA)	(NA)	(NA)	53.4	901.7	42.3	85.8	623.1	1 842.9	1 501.9	3 342.2	81.9	363.4	(NA)	(NA)
1985 ASM	(NA)	(NA)	(NA)	54.5	863.5	44.6	89.1	611.0	1 659.4	1 425.9	3 083.6	67.3	356.2	(NA)	(NA)
1984 ASM	(NA)	(NA)	(NA)	58.4	841.1	48.1	98.1	601.0	1 645.9	1 434.2	3 061.4	74.5	365.1	(NA)	(NA)
1983 ASM	(NA)	(NA)	(NA)	49.5	678.4	40.7	79.0	506.9	1 421.9	1 067.8	2 482.7	52.5	337.0	(NA)	(NA)
1982 Census	2 902	2 964	489	43.6	606.9	34.6	67.1	442.5	1 144.3	906.8	2 060.7	43.8	287.3	96	97
1981 ASM	(NA)	(NA)	(NA)	49.9	637.5	39.7	77.8	444.9	1 290.6	901.6	2 195.8	[5]49.1	241.4	(NA)	(NA)
1980 ASM	(NA)	(NA)	(NA)	55.1	646.3	43.3	83.0	468.3	1 209.6	974.6	2 183.6	42.6	239.7	(NA)	(NA)
1979 ASM	(NA)	(NA)	(NA)	56.7	633.1	46.5	88.8	450.7	1 161.6	989.4	2 145.3	[5]70.1	233.6	(NA)	(NA)
1978 ASM	(NA)	(NA)	(NA)	54.2	587.4	45.2	85.5	424.3	1 062.2	926.2	1 976.3	60.1	253.9	(NA)	(NA)
1977 Census	2 541	2 583	510	46.2	481.1	38.7	72.3	352.3	868.8	730.6	1 590.8	36.7	212.3	96	96
1976 ASM	(NA)	(NA)	(NA)	32.8	309.9	27.0	48.0	229.5	555.5	478.7	1 020.9	23.1	143.6	(NA)	(NA)
1975 ASM	(NA)	(NA)	(NA)	31.3	282.1	25.6	48.0	206.3	469.1	428.0	906.1	19.4	127.6	(NA)	(NA)
1974 ASM	(NA)	(NA)	(NA)	35.4	292.1	29.3	54.0	216.9	494.0	467.3	962.4	23.0	137.8	(NA)	(NA)
1973 ASM	(NA)	(NA)	(NA)	43.1	326.8	36.5	72.1	240.7	531.1	497.8	1 031.7	[5]27.8	149.3	(NA)	(NA)
1972 Census	1 761	1 796	396	38.8	286.6	32.2	62.0	208.1	486.7	420.1	897.2	28.3	119.7	95	96
INDUSTRY 2435, HARDWOOD VENEER AND PLYWOOD															
1987 Census	(NA)	313	215	20.6	341.0	17.5	35.4	247.6	730.8	1 327.2	2 044.0	31.6	288.3	92	96
1986 ASM	(NA)	(NA)	(NA)	17.0	268.7	14.3	29.7	197.4	632.0	946.9	1 585.2	[5]38.0	211.3	(NA)	(NA)
1985 ASM	(NA)	(NA)	(NA)	17.3	273.8	14.8	29.2	194.8	552.0	939.3	1 510.0	[5]34.9	213.7	(NA)	(NA)
1984 ASM	(NA)	(NA)	(NA)	18.3	272.8	15.6	31.2	198.5	571.0	1 010.7	1 578.8	40.3	223.1	(NA)	(NA)
1983 ASM	(NA)	(NA)	(NA)	19.3	271.2	16.5	32.7	202.7	553.8	978.6	1 537.1	17.3	223.0	(NA)	(NA)
1982 Census	264	306	213	17.8	241.0	15.1	28.5	177.0	441.3	844.9	1 304.4	22.2	194.0	93	94
1981 ASM	(NA)	(NA)	(NA)	22.7	279.2	19.6	37.5	216.4	526.1	1 016.5	1 534.7	33.4	235.3	(NA)	(NA)
1980 ASM	(NA)	(NA)	(NA)	23.6	265.4	20.4	38.3	205.0	466.3	1 014.1	1 493.5	41.9	231.8	(NA)	(NA)
1979 ASM	(NA)	(NA)	(NA)	24.2	258.9	21.2	41.5	202.6	475.9	1 091.3	1 554.3	32.5	239.2	(NA)	(NA)
1978 ASM	(NA)	(NA)	(NA)	22.7	228.5	19.7	38.4	176.0	452.4	933.4	1 381.2	27.6	198.9	(NA)	(NA)
1977 Census	274	321	227	22.3	211.5	19.1	37.9	162.0	420.4	860.4	1 272.3	29.6	197.7	91	93
1976 ASM	(NA)	(NA)	(NA)	21.9	180.4	19.1	37.4	137.7	328.9	642.3	970.1	17.9	147.3	(NA)	(NA)
1975 ASM	(NA)	(NA)	(NA)	20.6	159.3	17.8	34.3	118.3	268.2	569.9	847.1	21.4	132.1	(NA)	(NA)
1974 ASM	(NA)	(NA)	(NA)	25.4	183.3	22.1	43.6	141.0	297.7	664.7	956.0	23.3	160.7	(NA)	(NA)
1973 ASM	(NA)	(NA)	(NA)	25.0	165.9	21.9	44.4	129.8	341.8	602.9	945.4	14.6	159.1	(NA)	(NA)
1972 Census	326	366	254	25.1	165.2	22.1	46.1	129.1	340.8	582.4	911.8	32.1	142.0	91	92
INDUSTRY 2436, SOFTWOOD VENEER AND PLYWOOD															
1987 Census	(NA)	227	187	38.2	874.9	34.6	75.7	755.4	1 930.4	2 938.2	4 876.5	109.2	233.7	87	95
1986 ASM	(NA)	(NA)	(NA)	35.9	826.1	32.3	71.9	711.3	1 678.4	2 727.6	4 401.1	95.8	251.1	(NA)	(NA)
1985 ASM	(NA)	(NA)	(NA)	35.7	798.7	32.1	70.0	691.5	1 495.4	2 578.4	4 091.2	130.9	241.3	(NA)	(NA)
1984 ASM	(NA)	(NA)	(NA)	37.5	823.4	33.7	72.2	712.8	1 332.6	2 773.5	4 108.4	101.8	284.1	(NA)	(NA)
1983 ASM	(NA)	(NA)	(NA)	38.1	785.9	34.4	72.4	681.1	1 333.9	2 747.7	4 062.7	86.5	294.3	(NA)	(NA)
1982 Census	135	250	199	34.9	667.3	31.1	63.7	568.6	831.5	2 363.9	3 221.5	99.7	263.3	84	94
1981 ASM	(NA)	(NA)	(NA)	39.4	721.5	35.3	69.6	614.6	997.7	2 681.2	3 687.8	187.1	321.7	(NA)	(NA)
1980 ASM	(NA)	(NA)	(NA)	41.9	711.1	37.5	73.3	608.4	1 179.9	2 556.8	3 731.0	201.0	321.1	(NA)	(NA)
1979 ASM	(NA)	(NA)	(NA)	47.6	775.3	43.3	87.8	679.9	1 483.3	2 791.9	4 295.3	144.0	301.6	(NA)	(NA)
1978 ASM	(NA)	(NA)	(NA)	47.5	731.0	42.7	91.2	641.2	1 830.9	2 647.3	4 463.8	[5]192.8	281.4	(NA)	(NA)
1977 Census	129	256	224	46.2	634.6	41.9	89.4	556.9	1 583.7	2 231.1	3 804.8	105.6	242.6	88	91
1976 ASM	(NA)	(NA)	(NA)	45.0	537.8	40.5	84.5	468.0	1 304.2	1 880.5	3 164.1	85.0	220.0	(NA)	(NA)
1975 ASM	(NA)	(NA)	(NA)	41.1	438.6	36.7	75.0	377.5	850.3	1 386.5	2 243.5	84.7	176.9	(NA)	(NA)
1974 ASM	(NA)	(NA)	(NA)	42.8	421.1	38.5	78.1	363.3	832.0	1 299.8	2 123.8	85.1	170.6	(NA)	(NA)
1973 ASM	(NA)	(NA)	(NA)	45.5	442.2	41.3	87.7	388.7	1 097.2	1 283.5	2 365.1	80.8	153.9	(NA)	(NA)
1972 Census	121	232	225	43.7	403.6	39.9	85.3	356.5	935.4	1 071.3	2 011.5	65.4	113.6	88	99
INDUSTRY 2439, STRUCTURAL WOOD MEMBERS, N.E.C.															
1987 Census	(NA)	885	396	24.5	434.0	18.4	35.1	271.9	767.3	1 157.7	1 925.5	46.5	159.3	97	95
1986 ASM	(NA)	(NA)	(NA)	16.7	292.3	11.9	22.4	183.8	473.3	850.3	1 327.2	33.5	129.4	(NA)	(NA)
1985 ASM	(NA)	(NA)	(NA)	15.5	267.1	11.2	20.5	159.8	467.7	739.9	1 209.6	[5]37.9	124.1	(NA)	(NA)
1984 ASM	(NA)	(NA)	(NA)	14.7	228.2	11.0	21.8	138.7	500.9	738.0	1 233.8	[5]25.3	119.5	(NA)	(NA)
1983 ASM	(NA)	(NA)	(NA)	15.4	236.6	12.3	23.7	164.5	430.0	714.4	1 134.4	[5]37.8	131.7	(NA)	(NA)
1982 Census	649	704	190	12.2	185.5	9.3	17.8	126.0	330.5	516.8	847.9	16.1	99.3	96	95
1981 ASM	(NA)	(NA)	(NA)	13.2	184.4	10.0	19.1	113.6	363.8	502.7	873.8	[5]23.7	84.0	(NA)	(NA)
1980 ASM	(NA)	(NA)	(NA)	15.9	200.6	12.2	22.3	127.0	398.0	564.6	970.9	25.5	96.9	(NA)	(NA)
1979 ASM	(NA)	(NA)	(NA)	18.1	210.3	14.1	26.8	137.5	452.0	676.8	1 132.1	[5]34.1	102.7	(NA)	(NA)
1978 ASM	(NA)	(NA)	(NA)	16.4	188.3	13.2	24.3	127.9	436.0	638.6	1 076.1	[5]40.7	108.9	(NA)	(NA)

See footnotes at end of table.

Table 1. Historical Statistics for the Industry: 1987 and Earlier Years—Con.

[Excludes data for auxiliaries. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix]

Year[1]	Companies[2] (no.)	All establishments[3]		All employees		Production workers			Value added by manufacture[4] (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures (million dollars)	End-of-year inventories[4] (million dollars)	Ratios	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)						Specialization (percent)	Coverage (percent)
	INDUSTRY 2439, STRUCTURAL WOOD MEMBERS, N.E.C.—Con.														
1977 Census	620	656	225	13.8	147.0	11.0	20.8	101.6	330.0	484.4	807.7	19.7	87.3	94	93
1976 ASM	(NA)	(NA)	(NA)	12.3	130.3	9.6	18.8	86.3	291.2	363.5	654.7	[5]20.5	65.0	(NA)	(NA)
1975 ASM	(NA)	(NA)	(NA)	10.9	107.4	8.6	16.9	70.8	220.3	287.6	510.1	[5]16.0	54.1	(NA)	(NA)
1974 ASM	(NA)	(NA)	(NA)	11.3	97.9	8.8	17.7	65.1	217.2	292.2	509.4	[5]17.6	55.7	(NA)	(NA)
1973 ASM	(NA)	(NA)	(NA)	14.1	111.5	10.7	19.8	75.3	220.6	368.4	584.6	[5]17.4	63.5	(NA)	(NA)
1972 Census	642	678	196	12.6	94.4	9.8	18.6	62.6	182.8	276.0	456.0	11.8	48.5	95	90

Note: Establishments of single unit companies with up to 20 employees (cutoff varied by industry) were excluded from the mail portion of the census. Data for these establishments (and a small number of larger establishments whose reports were not received at the time the data were tabulated) were estimated based on administrative-record information from other agencies in conjunction with industry averages. These establishments accounted for the following percent of total value of shipments: SIC 2431, 18%; SIC 2434, 22%; SIC 2435, 16%; SIC 2436, 6%; and SIC 2439, 20%.

[1]In annual survey of manufactures (ASM) years, data are estimates based on a representative sample of establishments canvassed annually and may differ from results of a complete canvass of all establishments. ASM publication shows percentage standard errors. Unless otherwise noted, for data prior to 1972, see 1972 Census of Manufactures, vol. II, table 1a of the Industry chapter.

[2]For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

[3]Includes establishments with payroll at any time during year.

[4]Beginning with the 1982 Census of Manufactures, all respondents were requested to report their inventories at (the lower of) cost or market prior to adjustment to LIFO cost. This is a change from prior Censuses and annual survey of manufactures in which respondents were permitted to value their inventories using any generally accepted accounting method. Consequently, inventories and value added by manufacture are not comparable to prior-year data.

[5]Estimates for new capital expenditures have associated standard error of 15 percent or more and may be of limited reliability. Estimates for other data items are of acceptable reliability.

Table 2. Product and Product Classes—Quantity and Value of Shipments by All Producers: 1987 and 1982

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. For further explanation, see Value of Shipments in appendix. For meaning of abbreviations and symbols, see introductory text]

1987 product code	Product	1987			1982		
		Number of companies with shipments of $100,000 or more	Product shipments[1]		Number of companies with shipments of $100,000 or more	Product shipments[1]	
			Quantity[2]	Value (million dollars)		Quantity[2]	Value (million dollars)
2431- --	**MILLWORK**						
	Total	**(NA)**	**(X)**	**8 736.8**	**(NA)**	**(X)**	**3 988.4**
24311 --	Wood window units	(NA)	(X)	1 995.1	(NA)	(X)	692.1
	Double hung:						
24311 31	Cladded thousands	(NA)	*4 799.9	529.9	32	(S)	' 176.2
24311 32	Other do	(NA)	*2 524.3	224.1	58	' *622.2	' 71.9
24311 34	Awning do	(NA)	(S)	27.0	18	**421.9	32.5
	Casement:						
24311 35	Cladded thousands	(NA)	*5 854.1	720.4	34	' *188.3	' 214.3
24311 36	Other do	(NA)	*1 886.5	217.6	44	' *1 067.1	' 91.5
24311 41	Horizontal sliding do	(NA)	(S)	46.9	20	**583.5	42.2
24311 45	All other, including single hung do	(NA)	(S)	197.5	31	*590.5	45.9
24311 00	Wood window units, n.s.k.	(NA)	(X)	31.7	(NA)	(X)	17.6
24312 --	Wood window sash, including combination screen and storm sash, and window screens, excluding window units (Note: double hung window to be counted as two sash)	(NA)	(X)	184.6	(NA)	(X)	60.6
24312 09	Knockdown (k.d.) and open thousands	(NA)	(S)	68.3	15	(S)	18.9
24312 15	Glazed do	(NA)	*2 590.5	92.6	20	1 322.3	29.8
24312 00	Wood window sash, including combination screen and storm sash, and window screens, excluding window units, n.s.k.	(NA)	(X)	23.7	(NA)	(X)	11.9
24313 --	Wood window and door frames, and door frames shipped in door units, excluding window frames shipped in window units	(NA)	(X)	329.0	(NA)	(X)	190.2
24313 13	Window frames, wood thousands	(NA)	3 046.5	119.7	36	(S)	62.1
24313 15	Door frames, wood do	(NA)	(S)	208.9	83	**3 096.0	119.2
24313 00	Wood window and door frames, n.s.k.	(NA)	(X)	.4	(NA)	(X)	8.9
24314 --	Wood doors, interior and exterior (including those with glazed sections and doors shipped in door units)	(NA)	(X)	1 509.5	(NA)	(X)	775.5
	Panel type (including French doors):						
24314 11	Douglas fir thousands	(NA)	*2 355.4	204.4	40	*1 815.1	106.9
24314 13	Western pines do	(NA)	*3 733.5	319.6	40	**1 619.6	73.0
24314 19	Other species do	(NA)	(S)	39.5	34	**401.4	40.8
	Flush type, hollow core:						
24314 31	Softwood faces thousands	(NA)	(S)	49.8	15	*2 219.8	32.4
24314 33	Hardwood faces, including lauan, birch, oak, etc. do	(NA)	*15 074.2	265.5	88	**10 806.7	144.9
24314 35	Hardboard faces do	(NA)	(S)	97.8	45	(S)	59.4
24314 37	Other faces do	(NA)	*6 004.5	103.7	15	**1 707.8	29.2
	Flush type, solid core:						
	Hardwood faces, including lauan, birch, oak, etc.:						
24314 41	Solid wood core thousands	(NA)	(S)	80.7	49	**1 139.3	71.0
24314 45	Solid composition core do	(NA)	*3 541.1	183.7	62	*2 563.6	111.2
24314 46	Hardboard faces do	(NA)	*1 142.0	38.0	20	**735.3	20.8
24314 48	Softwood and other faces do	(NA)	*638.7	33.7	17	*212.8	20.4
24314 00	Wood doors, interior and exterior, n.s.k.	(NA)	(X)	93.1	(NA)	(X)	65.5

See footnotes at end of table.

Table 2. Product and Product Classes—Quantity and Value of Shipments by All Producers: 1987 and 1982—Con.

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. For further explanation, see Value of Shipments in appendix. For meaning of abbreviations and symbols, see introductory text]

1987 product code	Product	1987			1982		
		Number of companies with shipments of $100,000 or more	Product shipments[1]		Number of companies with shipments of $100,000 or more	Product shipments[1]	
			Quantity[2]	Value (million dollars)		Quantity[2]	Value (million dollars)
2431- --	**MILLWORK**—Con.						
24315 --	Other wood doors, including garage, screen, storm, combination screen and storm, and louver	(NA)	(X)	943.2	(NA)	(X)	480.4
24315 61	Garage doors, wood ..... 1,000 openings	(NA)	(S)	263.0	39	*1 355.7	147.0
24315 75	Screen doors and combination screen and storm doors ..... thousands	(NA)	(S)	31.3	14	614.9	14.5
24315 81	Louver doors ..... do	(NA)	(S)	53.6	34	(S)	44.8
24315 84	Bifold doors ..... do	(NA)	(S)	127.0	49	(S)	61.9
24315 85	Sliding patio doors ..... do	(NA)	*831.6	253.5	27	295.9	89.2
24315 98	Other wood doors, including storm, cabinet, toilet, grain, etc.	(NA)	(X)	198.5	48	(X)	87.0
24315 00	Other wood doors, n.s.k.	(NA)	(X)	16.4	(NA)	(X)	36.0
24316 --	Wood moldings except prefinished moldings made from purchased moldings	(NA)	(X)	1 077.7	(NA)	(X)	507.9
	Softwood (includes softwood covered with metal, plastics, etc.):						
24316 21	Pine ..... mil bd ft lum	(NA)	(S)	789.7	89	(S)	381.7
24316 31	Other softwood species ..... mil bd ft lum cons	(NA)	(S)	88.1	29	(S)	28.2
24316 51	Hardwood, including lauan, and hardwood covered with metal, plastics, etc. ..... do	(NA)	**125.6	141.2	66	**67.8	65.8
24316 00	Wood moldings except prefinished moldings made from purchased moldings, n.s.k.	(NA)	(X)	58.7	(NA)	(X)	32.2
24317 --	Prefinished wood moldings made from purchased moldings	(NA)	(X)	127.6	(NA)	(X)	99.1
	Softwood (including softwood covered with metal, plastics, etc.):						
24317 21	Pine ..... mil lin ft	(NA)	(S)	84.6	14	(S)	66.1
24317 31	Other softwood species ..... do	(NA)	(S)	5.8	5	(S)	11.8
24317 71	Hardwood, including lauan and hardwood covered with metal, plastics, etc. ..... do	(NA)	(S)	26.0	17	(S)	15.1
24317 00	Prefinished wood moldings made from purchased moldings, n.s.k.	(NA)	(X)	11.2	(NA)	(X)	6.0
24318 --	Other millwork products, including stairwork and exterior millwork	(NA)	(X)	862.2	(NA)	(X)	405.4
	Stairwork (including treads, risers, balusters, brackets, crooks, newels, rails, etc.):						
24318 21	Softwood	(NA)	(X)	73.5	29	(X)	31.7
24318 25	Hardwood	(NA)	(X)	170.1	57	(X)	45.9
24318 33	Exterior wood blinds and shutters, with or without their hardware (excluding fibrous vegetable materials)	(NA)	(X)	35.0	27	(X)	29.8
24318 35	Exterior millwork, including porch columns, porch rails, newels, trellises, and entrances	(NA)	(X)	57.6	35	(X)	32.6
	Nonstandard or specialty wood moldings, carvings, and ornaments suitable for architectural or furniture decorations:						
24318 73	Softwood	(NA)	(X)	20.5	79	(X)	86.3
24318 77	Hardwood	(NA)	(X)	35.8			
24318 98	Other millwork products, n.e.c., including interior millwork	(NA)	(X)	427.5	168	(X)	159.6
24318 00	Other millwork products, n.s.k.	(NA)	(X)	42.3	(NA)	(X)	19.5
24310 --	Millwork products, n.s.k.	(NA)	(X)	1 708.1	(NA)	(X)	777.2
24310 00	Millwork products, n.s.k., typically for establishments with 5 employees or more (see note)	(NA)	(X)	1 443.0	(NA)	(X)	602.1
24310 02	Millwork products, n.s.k., typically for establishments with less than 5 employees (see note)	(NA)	(X)	265.1	(NA)	(X)	175.1
2434- --	**WOOD KITCHEN CABINETS**						
	Total	**(NA)**	**(X)**	**4 247.1**	**(NA)**	**(X)**	**2 001.3**
24341 --	Wood kitchen cabinets and cabinetwork, stock line	(NA)	(X)	1 615.3	(NA)	(X)	708.0
24341 11	Wood ..... 1,000 cabinets	(NA)	*19 814.8	1 278.1	164	*9 418.8	547.2
24341 13	Plastics laminated	(NA)	(X)	264.1	55	(S)	95.3
24341 00	Wood kitchen cabinets and cabinetwork, stock line, n.s.k.	(NA)	(X)	73.1	(NA)	(X)	65.5
24342 --	Wood kitchen cabinets and cabinetwork, custom	(NA)	(X)	1 104.5	(NA)	(X)	496.4
24342 12	Wood ..... 1,000 cabinets	(NA)	(S)	776.0	463	(S)	337.9
24342 14	Plastics laminated	(NA)	(X)	253.9	203	(S)	116.3
24342 00	Wood kitchen cabinets and cabinetwork, custom, n.s.k.	(NA)	(X)	74.6	(NA)	(X)	42.3
24343 --	Vanities and other cabinetwork	(NA)	(X)	467.5	(NA)	(X)	244.3
24343 16	Stock line ..... 1,000 units	(NA)	6 363.2	250.0	80	(S)	109.3
24343 18	Custom	(NA)	(X)	177.3	221	(S)	102.8
24343 00	Vanities and other cabinetwork, n.s.k.	(NA)	(X)	40.2	(NA)	(X)	32.2
24340 --	Wood kitchen cabinets, n.s.k.	(NA)	(X)	1 059.9	(NA)	(X)	552.6
24340 00	Wood kitchen cabinets, n.s.k., typically for establishments with 5 employees or more (see note)	(NA)	(X)	795.4	(NA)	(X)	393.8
24340 02	Wood kitchen cabinets, n.s.k., typically for establishments with less than 5 employees (see note)	(NA)	(X)	264.5	(NA)	(X)	158.8

See footnotes at end of table.

Table 2. Product and Product Classes—Quantity and Value of Shipments by All Producers: 1987 and 1982—Con.

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. For further explanation, see Value of Shipments in appendix. For meaning of abbreviations and symbols, see introductory text]

1987 product code	Product	1987				1982			
		Number of companies with shipments of $100,000 or more	Quantity of production for all purposes	Product shipments[1]		Number of companies with shipments of $100,000 or more	Quantity of production for all purposes	Product shipments[1]	
				Quantity[2]	Value (million dollars)			Quantity[2]	Value (million dollars)
2435- --	**HARDWOOD VENEER AND PLYWOOD**								
	Total	**(NA)**	**(X)**	**(X)**	**1 840.3**	**(NA)**	**(X)**	**(X)**	**1 237.0**
24351 --	Hardwood plywood:[3]								
24351 00	Hardwood plywood (for additional detail, see Current Industrial Report MA-24F, Hardwood Plywood) ---- mil sq ft sm--	(NA)	(X)	(S)	758.1	96	(X)	996.3	530.6
24352 --	Prefinished hardwood plywood made from purchased plywood:								
24352 00	Prefinished hardwood plywood made from purchased plywood (for additional detail, see Current Industrial Report MA-24F, Hardwood Plywood) ---- mil sq ft sm--	(NA)	(X)	(S)	317.6	15	(X)	1 181.5	225.8
24353 --	Hardwood plywood type products ----	(NA)	(X)	(X)	235.8	(NA)	(X)	(X)	159.7
24353 11	Hardwood veneer, reinforced or backed ---- mil sq ft sm--	(NA)	(X)	835.0	56.7				
24353 31	Hardwood veneered panels ---- do--	(NA)	(X)	**71.3	26.5	(NA)	(X)	(S)	156.1
24353 98	Other hardwood plywood type products, including cellular panels and curved and molded plywood ---- do--	(NA)	(X)	**614.9	148.1				
24353 00	Hardwood plywood type products, n.s.k. ----	(NA)	(X)	(X)	4.5	(NA)	(X)	(X)	3.6
24354 --	Hardwood veneer, not reinforced or backed ----	(NA)	(X)	(X)	421.4	(NA)	(X)	(X)	277.7
24354 15	Birch ---- mil sq ft sm--	(NA)	466.9	456.4	30.5	9	216.2	141.2	11.9
24354 17	Maple ---- do--	(NA)	200.3	191.1	22.8	20	142.3	*128.7	9.4
24354 19	Oak ---- do--	(NA)	1 647.4	1 502.9	149.3	53	1 546.7	1 369.1	104.7
24354 21	Walnut ---- do--	(NA)	342.8	342.1	40.7	30	598.4	588.8	38.4
24354 27	Other domestic hardwoods ---- do--	(NA)	*1 802.4	*1 793.5	116.3	72	1 308.5	*1 211.8	89.6
24354 31	Imported hardwoods ---- do--	(NA)	15.0	14.6	4.7				
24354 00	Hardwood veneer, not reinforced or backed, n.s.k. ----	(NA)	(X)	(X)	57.2	(NA)	(X)	(X)	23.8
24350 --	Hardwood veneer and plywood, n.s.k. ----	(NA)	(X)	(X)	107.4	(NA)	(X)	(X)	43.2
24350 00	Hardwood veneer and plywood, n.s.k., typically for establishments with 10 employees or more (see note) ----	(NA)	(X)	(X)	64.2	(NA)	(X)	(X)	16.4
24350 02	Hardwood veneer and plywood, n.s.k., typically for establishments with less than 10 employees (see note) ----	(NA)	(X)	(X)	43.2	(NA)	(X)	(X)	26.8
2436- --	**SOFTWOOD VENEER AND PLYWOOD**								
	Total	**(NA)**	**(X)**	**(X)**	**4 385.1**	**(NA)**	**(X)**	**(X)**	**2 780.0**
24363 --	Softwood plywood type products ----	(NA)	(X)	(X)	132.7	(NA)	(X)	(X)	73.5
24363 11	Softwood veneer, reinforced or backed ---- mil sq ft sm--	(NA)	(X)	*285.0	43.1				
24363 31	Softwood veneered panels ---- do--	(NA)	(X)	*573.2	75.8	(NA)	(X)	(S)	68.3
24363 98	Other softwood plywood type products, including cellular panels, and curved and molded plywood ---- do--	(NA)	(X)	(S)	12.1				
24363 00	Softwood plywood type products, n.s.k. ----	(NA)	(X)	(X)	1.7	(NA)	(X)	(X)	5.2
24364 --	Softwood veneer, not reinforced or backed:								
24364 00	Softwood veneer, not reinforced or backed ---- mil sq ft (1 in. basis)--	(NA)	(X)	*4 359.1	529.6	(NA)	(S)	(S)	315.8
24365 --	Softwood plywood, rough:								
24365 00	Softwood plywood, rough (including touch sanded) interior and exterior (for additional detail, see Current Industrial Report MA-24H, Softwood Plywood) ---- mil sq ft (3/8 in. basis)--	(NA)	(X)	(S)	2 276.6	58	(X)	10 648.2	1 404.5
24366 --	Softwood plywood, sanded:								
24366 00	Softwood plywood, sanded, interior and exterior (for additional detail, see Current Industrial Report MA-24H, Softwood Plywood) ---- mil sq ft (3/8 in. basis)--	(NA)	(X)	(S)	756.4	41	(X)	3 222.3	572.8
24367 --	Softwood plywood specialties:								
24367 00	Softwood plywood specialties (including sidings, overlays, interior and other specialties) (for additional detail, see Current Industrial Report MA-24H, Softwood Plywood) ---- mil sq ft (3/8 in. basis)--	(NA)	(X)	(S)	604.8	(NA)	(X)	(S)	381.6
24360 --	Softwood veneer and plywood, n.s.k. ----	(NA)	(X)	(X)	85.0	(NA)	(X)	(X)	31.8
24360 00	Softwood veneer and plywood, n.s.k., typically for establishments with 10 employees or more (see note) ----	(NA)	(X)	(X)	71.9	(NA)	(X)	(X)	19.1
24360 02	Softwood veneer and plywood, n.s.k., typically for establishments with less than 10 employees (see note) ----	(NA)	(X)	(X)	13.1	(NA)	(X)	(X)	12.7

See footnotes at end of table.

Table 2. Product and Product Classes—Quantity and Value of Shipments by All Producers: 1987 and 1982—Con.

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. For further explanation, see Value of Shipments in appendix. For meaning of abbreviations and symbols, see introductory text]

1987 product code	Product	1987			1982		
		Number of companies with shipments of $100,000 or more	Product shipments[1]		Number of companies with shipments of $100,000 or more	Product shipments[1]	
			Quantity[2]	Value (million dollars)		Quantity[2]	Value (million dollars)
2439- --	**STRUCTURAL WOOD MEMBERS, N.E.C.**						
	Total	**(NA)**	**(X)**	**1 863.8**	**(NA)**	**(X)**	**800.2**
24390 --	Fabricated structural wood products:						
	Members for heavy timber construction, including wood laminates, laminated trusses, and heavy timber decking:						
24390 31	Glued laminated lumber ---- mil bd ft	(NA)	*448.2	257.1	30	*224.9	138.5
24390 33	Sawn lumber	(NA)	(X)	86.3	12	(S)	25.8
24390 35	Combination of glued, laminated and sawn lumber	(NA)	(X)	45.9	8	(S)	23.7
24390 51	Roof trusses made of sawn lumber, light construction, sold separately	(NA)	(X)	893.8	316	(S)	418.1
24390 98	Other fabricated structural wood products, n.e.c.	(NA)	(X)	195.5	43	(X)	66.7
24390 00	Structural wood members, n.e.c., n.s.k., typically for establishments with 5 employees or more (see note)	(NA)	(X)	315.1	(NA)	(X)	99.6
24390 02	Structural wood members, n.e.c., n.s.k., typically for establishments with less than 5 employees (see note)	(NA)	(X)	70.1	(NA)	(X)	27.8

Note: In 1987 Census of Manufactures, data for establishments of small single unit companies with up to 20 employees were estimated from administrative-record data rather than data actually collected from respondents. Employment cutoffs used for administrative records for each industry and shipments figures are included in code ending with "002". In both 1987 and 1982 Censuses of Manufactures, products not completely identified on standard forms were coded in appropriate product class (five-digit) followed by "00" or to appropriate product group code (four-digit) followed by "000".

[1]Data reported by all producers, not just those with shipments of $100,000 or more.
[2]For some establishments, data have been estimated from central unit values which are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: * 10 to 19 percent estimated; ** 20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by (S).
[3]Includes shipments of prefinished hardwood plywood made from plywood produced at same establishment.

Table 3. Materials Consumed by Kind: 1987 and 1982

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For further explanation, see Cost of Materials in appendix. For meaning of abbreviations and symbols, see introductory text]

1987 material code	Material	1987		1982	
		Quantity[1]	Delivered cost (million dollars)	Quantity[1]	Delivered cost (million dollars)
	INDUSTRY 2431, MILLWORK				
	Materials, parts, and supplies	**(X)**	**5 023.2**	**(X)**	**2 293.0**
241112	Softwood logs, bolts, and unsliced flitches ---- mil ft (log scale)	(S)	7.9	**40.9	12.4
	Rough lumber:				
242110	Hardwood ---- mil bd ft	(S)	237.9	**217.7	106.9
242121	Softwood ---- do	(S)	811.7	589.9	292.1
	Dressed lumber:				
242117	Hardwood	(X)	73.5	(X)	86.3
242128	Softwood	(X)	672.9	(X)	359.2
243540	Hardwood veneer ---- mil sq ft sm	(S)	118.5	(S)	61.1
	Hardwood plywood, other than container type:				
243511	Veneer core	(X)	36.0	(X)	38.8
243513	Board core, including lumber, particleboard, and hardboard core	(X)	23.6	(X)	15.5
243601	Softwood plywood ---- mil sq ft (3/8 in. basis)	(S)	28.1	(S)	6.9
249310	Particleboard (wood) ---- mil sq ft (3/4 in. basis)	(S)	39.6	(S)	17.2
249340	Hardboard (wood fiberboard) ---- mil sq ft (1/8 in. basis)	**360.2	43.5	(S)	44.6
249330	Medium density fiberboard (MDF)	(X)	20.7	(X)	8.5
308007	Plastics products consumed in the form of sheets, rods, tubes, and other shapes	(X)	94.0	(X)	16.6
342940	Builders' hardware, including door locks, locksets, lock trim, miscellaneous sash, screen, and shelf hardware; hinges and butts; hangers, tracks, and related items; cabinet hardware and all other builders' hardware	(X)	264.5	(X)	114.8
265001	Paperboard boxes and containers	(X)	40.7	(X)	12.7
970099	All other materials and components, parts, containers, and supplies	(X)	1 147.7	(X)	477.1
971000	Materials, parts, and supplies, n.s.k.[2]	(X)	1 362.4	(X)	622.3

See footnotes at end of table.

Table 3. **Materials Consumed by Kind: 1987 and 1982**—Con.

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For further explanation, see Cost of Materials in appendix. For meaning of abbreviations and symbols, see introductory text]

1987 material code	Material	1987 Quantity[1]	1987 Delivered cost (million dollars)	1982 Quantity[1]	1982 Delivered cost (million dollars)
	INDUSTRY 2434, WOOD KITCHEN CABINETS				
	Materials, parts, and supplies	**(X)**	**1 779.2**	**(X)**	**843.8**
	Rough lumber:				
242110	Hardwood, mil bd ft	(S)	60.5	(S)	23.8
242121	Softwood, do	(S)	3.2	(S)	7.0
	Dressed lumber:				
242117	Hardwood	(X)	148.2	(X)	56.2
242128	Softwood	(X)	17.2	(X)	19.0
	Hardwood plywood other than container type:				
243511	Veneer core	(X)	49.2	(X)	19.9
243513	Board core, including lumber, particleboard, and hardboard core	(X)	40.5	(X)	20.1
243601	Softwood plywood, mil sq ft (3/8 in. basis)	(S)	12.2	(S)	10.0
243540	Hardwood veneer, mil sq ft sm	(S)	22.8	(S)	7.9
249310	Particleboard (wood), mil sq ft (3/4 in. basis)	(S)	106.4	(S)	48.4
249340	Hardboard (wood fiberboard), mil sq ft (1/8 in. basis)	(S)	19.8	(S)	13.1
249330	Medium density fiberboard (MDF)	(X)	20.0	(X)	15.6
308007	Plastics products consumed in the form of sheets, rods, tubes and other shapes	(X)	39.3	(X)	18.7
342940	Builders' hardware, including door locks, locksets, lock trim; miscellaneous sash, screen, and shelf hardware; hinges and butts, hangers, tracks and related items; cabinet hardware, and all other builders' hardware	(X)	120.9	(X)	40.5
265001	Paperboard boxes and containers	(X)	44.7	(X)	16.0
970099	All other materials and components, parts, containers, and supplies	(X)	309.3	(X)	135.3
971000	Materials, parts, and supplies, n.s.k.[2]	(X)	765.0	(X)	392.3

1987 material code	Material	1987 Consumption of materials received from other establishments: Quantity[1]	1987 Consumption of materials received from other establishments: Delivered cost (million dollars)	1987 Materials made and consumed in same plant (quantity)	1982 Consumption of materials received from other establishments: Quantity[1]	1982 Consumption of materials received from other establishments: Delivered cost (million dollars)	1982 Materials made and consumed in same plant (quantity)
	INDUSTRY 2435, HARDWOOD VENEER AND PLYWOOD						
	Materials, parts, and supplies	**(X)**	**1 166.2**	**(X)**	**(X)**	**778.6**	**(X)**
081111	Stumpage cost (cost of timber, excluding land, cut and consumed at same establishment)	(X)	29.5	(X)	(X)	9.9	(X)
	Logs, bolts, and unsliced flitches:						
241111	Hardwood, mil ft (log scale)	(S)	137.6	(X)	*375.9	78.2	(S)
241112	Softwood, do	84.8	10.0	(X)	96.9	20.1	-
242111	Hardwood lumber, rough and dressed, mil bd ft	(S)	37.4	(X)	80.6	10.9	(D)
	Veneer:						
243540	Hardwood, mil sq ft sm	*3 194.1	313.3	(NA)	*2 721.8	277.0	(S)
243640	Softwood, mil sq ft (1 in. basis)	(S)	22.8	(NA)	129.9	27.5	(D)
	Plywood:						
243510	Hardwood, mil sq ft sm	*1 183.2	152.5	(X)	(S)	96.4	(X)
243601	Softwood, mil sq ft (3/8 in. basis)	(D)	(D)	(X)	(D)	(D)	(X)
	Particleboard:						
249310	Conventional, mil sq ft (3/4 in. basis)	*967.3	68.3	(X)	(S)	49.1	(X)
249323	Waferboard (phenolic bonded), do	-	-				
249322	Oriented strand board, do	(Z)	(Z)				
249330	Medium density fiberboard (MDF), do	87.5	21.9	(X)	**57.1	16.3	(X)
249340	Hardboard (wood fiberboard), mil sq ft (1/8 in. basis)	(D)	(D)	(X)	37.0	8.9	(X)
289101	Glues and adhesives (soybean, casein, blood, albumen, synthetic resin adhesives, etc.), mil lb	(S)	23.9	(X)	(S)	22.4	(X)
282104	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc., excluding sheets, rods, tubes, and shapes, do	(D)	(D)	(X)	(D)	(D)	(X)
970099	All other materials and components, parts, containers, and supplies	(X)	175.1	(X)	(X)	80.5	(X)
971000	Materials, parts, and supplies, n.s.k.[2]	(X)	158.3	(X)	(X)	71.0	(X)
	INDUSTRY 2436, SOFTWOOD VENEER AND PLYWOOD						
	Materials, parts, and supplies	**(X)**	**2 687.5**	**(X)**	**(X)**	**2 180.4**	**(X)**
081111	Stumpage cost (cost of timber, excluding land, cut and consumed at same establishment)	(X)	141.8	(X)	(X)	253.7	(X)
	Logs, bolts, and unsliced flitches:						
241111	Hardwood, mil ft (log scale)	294.0	68.5	(X)	(S)	18.8	(D)
241112	Softwood, do	(S)	1 342.8	(X)	4 574.6	1 176.1	(D)
242123	Softwood lumber, rough and dressed, mil bd ft	30.0	11.5	(X)	(S)	14.2	108.8

See footnotes at end of table.

Table 3. **Materials Consumed by Kind: 1987 and 1982**—Con.

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For further explanation, see Cost of Materials in appendix. For meaning of abbreviations and symbols, see introductory text]

1987 material code	Material	1987			1982		
		Consumption of materials received from other establishments		Materials made and consumed in same plant (quantity)	Consumption of materials received from other establishments		Materials made and consumed in same plant (quantity)
		Quantity[1]	Delivered cost (million dollars)		Quantity[1]	Delivered cost (million dollars)	
	INDUSTRY 2436, SOFTWOOD VENEER AND PLYWOOD—Con.						
	Veneer:						
243540	Hardwood—mil sq ft sm...	78.1	12.0	(NA)	*82.1	8.9	(S)
243640	Softwood—mil sq ft (1 in. basis)...	3 110.7	405.2	(NA)	(S)	241.4	1 536.9
	Plywood:						
243510	Hardwood—mil sq ft sm...	(D)	(D)	(X)	(D)	(D)	(X)
243601	Softwood—mil sq ft (3/8 in. basis)...	248.7	40.3	(X)	*366.1	50.4	(X)
	Particleboard:						
249310	Conventional—mil sq ft (3/4 in. basis)...	(D)	(D)	(X)	(D)	(D)	(X)
249323	Waferboard (phenolic bonded)—do...	–	–				
249322	Oriented strand board—do...	–	–				
249330	Medium density fiberboard (MDF)—do...	(D)	(D)	(X)	(D)	(D)	(X)
249340	Hardboard (wood fiberboard)—mil sq ft (1/8 in. basis)...	(D)	(D)	(X)	7.1	.9	(X)
289101	Glues and adhesives (soybean, casein, blood, albumen, synthetic resin adhesives, etc.)—mil lb...	(S)	186.2	(X)	**1 008.0	131.6	(X)
282104	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc., excluding sheets, rods, tubes, and shapes—do...	(S)	9.4	(X)	**120.6	10.7	(X)
970099	All other materials and components, parts, containers, and supplies	(X)	314.7	(X)	(X)	215.1	(X)
971000	Materials, parts, and supplies, n.s.k.[2]	(X)	154.2	(X)	(X)	54.7	(X)

1987 material code	Material	1987		1982	
		Quantity[1]	Delivered cost (million dollars)	Quantity[1]	Delivered cost (million dollars)
	INDUSTRY 2439, STRUCTURAL WOOD MEMBERS, N.E.C.				
	Materials, parts, and supplies	**(X)**	**1 067.9**	**(X)**	**466.8**
	Rough lumber:				
242110	Hardwood—mil bd ft...	(S)	73.4	(S)	24.4
242121	Softwood—do...	*459.2	116.9	142.6	37.7
	Dressed lumber:				
242117	Hardwood—mil bd ft...	(S)	24.4	(S)	36.9
242128	Softwood—do...	*1 057.8	309.2	*541.4	136.4
243601	Softwood plywood—mil sq ft (3/8 in. basis)...	*115.4	22.1	(S)	3.2
342940	Builders' hardware, including door locks, locksets, lock trim, miscellaneous sash, screen, and shelf hardware; hinges and butts; hangers, tracks, and related items; cabinet hardware, and all other builders' hardware	(X)	10.2	(X)	[3]
344113	Fabricated structural iron and steel (includes truss plates) and aluminum—1,000 s tons...	(S)	33.2	(S)	15.4
970099	All other materials and components, parts, containers, and supplies	(X)	83.1	(X)	356.7
971000	All other materials, parts, and supplies, n.s.k.[2]	(X)	395.4	(X)	156.1

[1]For some establishments, data have been estimated from central unit values which are based on quantity-cost relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: * 10 to 19 percent estimated; ** 20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by (S).

[2]Total cost of materials of establishments that did not report detailed materials data, including establishments that were not mailed a form.

[3]For 1982 material code 342940 was included with material code 970099.

APPENDIX
Scope and Coverage and Explanation of Terms

GENERAL

The 1987 Census of Manufactures is the 32nd census of manufacturing establishments conducted in the United States. For 1987, it was conducted as part of the economic censuses, which included the censuses of mineral industries, construction industries, retail and wholesale trades, service industries, selected transportation activities, and minority-owned and women-owned businesses, under authority of title 13 of the United States Code. Title 13 specifies that an economic census be conducted every 5 years to cover years ending in 2 and 7.

SCOPE AND COVERAGE

Establishment Basis of Reporting

The census of manufactures is conducted on an establishment basis. All manufacturing establishments with one paid employee or more at any time during the year are covered by the census of manufactures. Therefore, a company operating at more than one location is required to file a separate report for each location. This report excludes information for separately operated administrative offices, warehouses, garages, and other auxiliary units which service manufacturing establishments of the same company. Where these auxiliary operations are conducted at the same location as the manufacturing operation, they are usually included in the report for the operating manufacturing establishment.

Use of Administrative Records

From a universe of approximately 350,000 manufacturing establishments in the 1987 Census of Manufactures, approximately 150,000 small single-establishment companies were excused from filing reports. Selection of the small establishment nonmail cases was done on an industry-by-industry basis. A variable cutoff was used to determine those establishments for which administrative records were to be used in place of a census report. The cutoffs were selected so the administrative-record cases would account for approximately 3 percent or less of the value of shipments for the industry. These cutoffs were then adjusted so that all single-establishment companies with less than 5 employees were excluded from the mail canvass, while all establishments with more than 20 employees were included. Where establishments in the 5 to 20 employee size range were included in the mail canvass, an abbreviated census form was frequently used.

For these nonmail establishments, (and a small number of larger establishment whose reports were not received at the time the data were tabulated) data on employment, payroll, and receipts were obtained from administrative records of other government agencies rather than from census forms. The administrative-record information was then used in conjunction with industry averages to estimate the data for these establishments. The value of shipments and cost of materials were not distributed among specific products and materials but were included in the product and material "not specified by kind" (n.s.k.) categories.

EXPLANATION OF TERMS

Number of establishments and companies–A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

All employees–Includes all full-time and part-time employees on the payrolls at any time during the year. Included are all persons on paid sick leave, paid holidays, and paid vacations. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average of those for midmonth payroll periods of March, May, August, and November.

Production workers–Includes workers up through the working-supervisor level engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial, guard services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Truckdrivers delivering ready-mixed concrete are also included in production workers.

Other employees–Includes nonproduction personnel, including those engaged in the following activities: supervision above working-supervisor level, sales (including driver/salespersons), sales delivery (truckdrivers and helpers), advertising, credit collection, installation and

servicing of own product, clerical and routine office functions, executive, purchasing, finance, legal, personnel (including cafeteria, etc.), professional, and technical employees.

Payroll–Includes the gross earnings for the "employees" defined above, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

Production-worker hours–Covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave when the employee was not at the plant.

Cost of materials–Refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuels consumed, regardless of whether they were purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

The important components of this cost item are (a) all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or generating electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

Specific materials consumed (table 3)–In addition to the total cost of materials which every establishment was required to report, information was also collected for most manufacturing industries on the consumption of major materials used in manufacturing. These inquiries were restricted to those materials which were important parts of the cost of production in a particular industry and for which cost information was available from manufacturers' records. Establishments consuming less than a specified amount (usually $10,000) of a specific material were not requested to report consumption of that material separately. Also, the cost of materials for the small establishments for which administrative records were used was estimated as "not specified by kind" (n.s.k.).

Value of shipments and other receipts–Generally refers to received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair receipts, sale of scrap, and sale of products bought and resold without further processing. Included are all items made by or for the establishment from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In a few industries, the value of production or value of work completed is used instead of value of shipments. These industries are identified in the introduction and are footnoted in table 1.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, that is, including not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead and profit).

Shipments or production of individual products (table 2)–In the 1987 census, detailed shipment information was collected for approximately 11,000 individual products. These products are identified by a seven-digit code and are grouped into approximately 1,500 classes of products, which in turn are primary to 459 four-digit industries. Data at the five-digit product-class level have been collected each year as part of the annual survey of manufactures. Information at the seven-digit level, collected for many industries in the current industrial reports program, is not included in this table.

Value added by manufacture–This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments for products manufactured plus receipts for services rendered. The result of this calculation is then adjusted by the addition of value added by merchandising operations (that is, the difference between the sales value and cost of merchandise sold without further manufacturing, processing, or assembly) plus the net change in finished goods and work-in-process inventories between the beginning and end of the year.

For those industries where value of production is collected instead of value of shipments (see footnote in table 1), value added is adjusted only for the change in work-in-process inventories between the beginning and end of the year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

Value added avoids the duplication in the figure for value of shipments which results from the use of products of some establishments as materials by others. Value

added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

Expenditures for new plant and equipment–Establishments in operation and any known plants under construction were asked to report their expenditures for (a) permanent additions and major alterations to manufacturing establishments and (b) new machinery and equipment used for replacement and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for used plant and equipment, expenditures for land, and cost of maintenance and repairs charged as current operating expenses. Data for used plant and equipment will be published in the final industry bulletin.

End-of-year inventories–Comprised of (a) finished products; (b) work-in-process; and (c) materials, supplies, fuels, etc. Beginning in 1982, respondents were asked to report their inventories at (the lower of) cost or market prior to adjustment to LIFO cost. This is a change from prior years in which respondents were permitted to value their inventories using any generally accepted accounting method. Therefore, 1982 through 1987 data for inventories are not strictly comparable to prior-year data.

Specialization and coverage ratios–An establishment is classified in a particular industry if its shipments of primary products of the industry exceed in value its shipments of the products of any other single industry. An establishments' shipments include those products assigned to an industry (primary products), those considered primary to other industries (secondary products), and receipts for miscellaneous activities (merchandising, contract work, resales, etc.). The following ratios have been developed to measure the relationship of primary product shipments to the data on shipments for the industry shown in table 1 and data on product shipments shown in table 2.

Specialization ratio–Represents the ratio of primary product shipments to total product shipments (primary and secondary, excluding miscellaneous receipts) for the establishments classified in the industry.

Coverage ratio–Represents the ratio of primary products shipped by the establishments classified in the industry to the total shipments of such products that are shipped by all manufacturing establishments, wherever classified.

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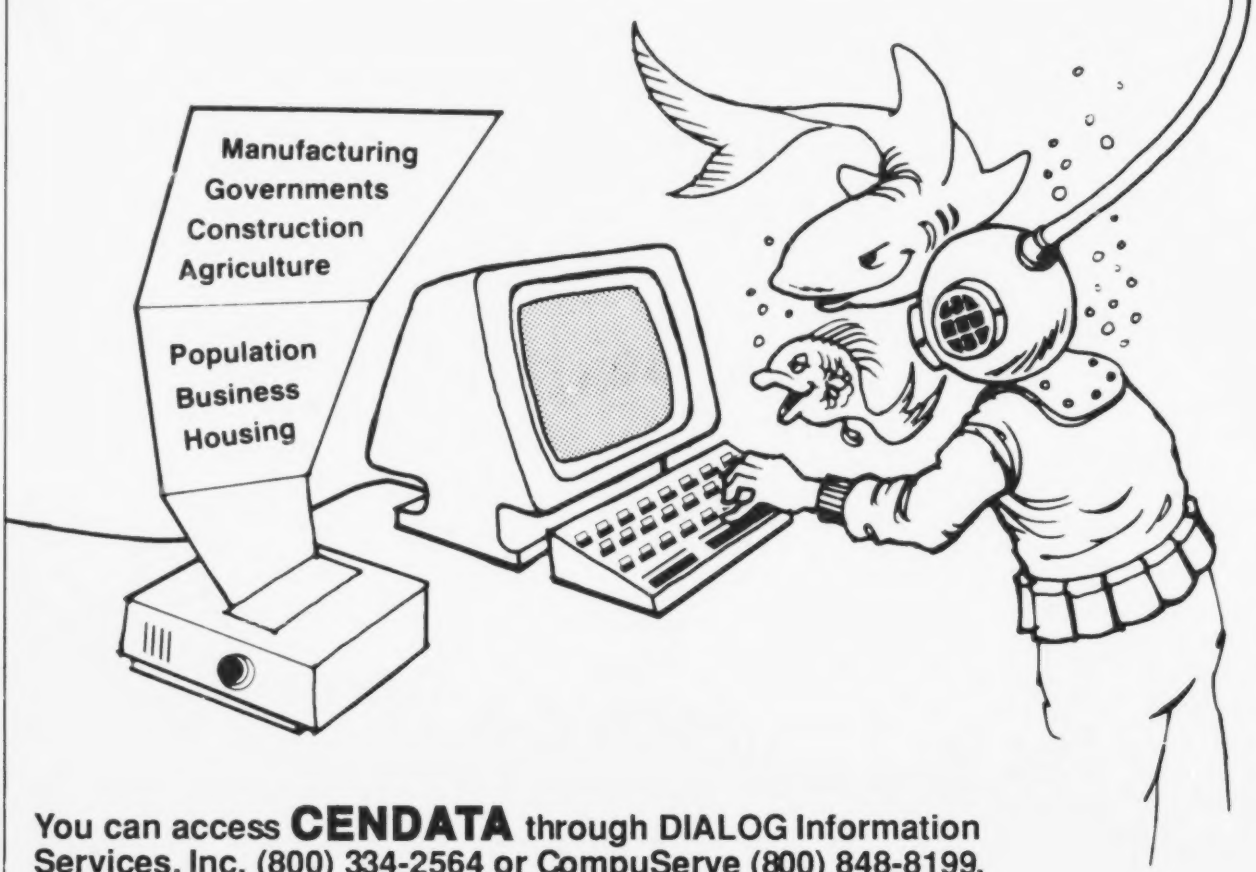

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